Application Serial No.: 10/029,413

IN THE CLAIMS:

1-10. (Canceled)

11. (Currently amended) An isolated and purified nucleic acid molecule encoding a ~~biologically active~~ functional platelet voltage dependent calcium channel (VDCC) α1 subunit polypeptide, wherein the isolated and purified nucleic acid molecule comprises a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence at least 90% identical to SEQ ID NO: 1, wherein the nucleotide sequence comprises SEQ ID NO: 29;

(b) a nucleotide sequence at least 90% identical to SEQ ID NO: 3, wherein the nucleotide sequence comprises SEQ ID NO: 28; and

(c) a nucleotide sequence that encodes a polypeptide having an amino acid sequence as set forth in one of SEQ ID NOs: 2 and 4.

12. (Canceled)

13. (Previously presented) The nucleic acid molecule of claim 11, further defined as a DNA segment.

14. (Previously presented) The nucleic acid molecule of claim 13, further defined as positioned under the control of a promoter.

15. (Previously presented) The nucleic acid molecule of claim 14, wherein said DNA segment and promoter are operationally inserted into a recombinant vector.

16. (Previously presented) A recombinant host cell comprising the nucleic acid molecule of claim 11.

17. (Previously presented) The recombinant host cell of claim 16, wherein the cell further comprises a platelet or a megakaryocyte.

18-33. (Canceled)

34. (Previously presented) A kit for detecting a polymorphism in a nucleic acid molecule encoding a platelet voltage dependent calcium channel (VDCC) α_1 subunit polypeptide, the kit comprising:

11, 17-17, 34-37, 63-64 remained as
1, 2-6, 7-10, 11-12

(a) a reagent for detecting a polymorphism in a nucleic acid molecule encoding a platelet VDCC α_1 subunit polypeptide in a biological sample; and

(b) a container for the reagent,

wherein the nucleic acid molecule encoding the platelet VDCC α_1 subunit polypeptide comprises a nucleotide sequence of claim 11.

8 ~~35~~. (Previously presented) The kit of claim 34, further comprising a reagent for amplifying a nucleic acid molecule encoding a platelet VDCC α_1 subunit polypeptide.

9 ~~36~~. (Previously presented) The kit of claim 35, wherein the amplifying reagent comprises a polymerase enzyme suitable for use in a polymerase chain reaction and a pair of oligonucleotides.

10 ~~37~~. (Previously presented) The kit of claim 35, further comprising a reagent for extracting a nucleic acid sample from a biological sample obtained from a subject.

38-62. (Canceled)

11 ~~63~~. (Previously presented) The isolated and purified nucleic acid molecule of claim 11, wherein the isolated and purified nucleic acid molecule comprises a nucleotide sequence selected from the group consisting of SEQ ID NO: 1 and SEQ ID NO: 3.

12 ~~64~~. (Previously presented) The isolated and purified nucleic acid molecule of claim 11, wherein the isolated and purified nucleic acid molecule comprises a nucleotide sequence absent both of SEQ ID NOs: 23 and 25.